



Year 5 Earth and Beyond Knowledge Organiser



Planets

- There are 8 planets in our Solar System (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune). Pluto is a dwarf planet.
- They all orbit the Sun, which is a star, and they all have moons.
- The first four planets are relatively small and rocky, while the four outer planets are gas giants (Jupiter and Saturn) or ice giants (Uranus and Neptune).



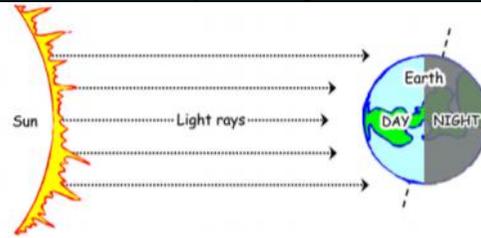
Orbits



- The Sun, Earth and Moon are approximately spherical.
- It takes 24 hours for the earth to rotate on its axis once.

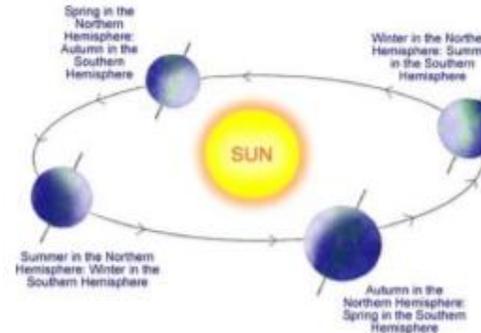
- It takes 365 and $\frac{1}{4}$ days for earth to orbit the sun.
- Every four years we have an additional day on Feb 29th - this is called a leap year.
- It takes 28 days for the moon to orbit earth.

Day and Night



- The Earth rotates on its axis anti-clockwise and makes a complete rotation over 24 hours (a day).
- This makes it appear as the Sun moves through the sky but the Earth's rotation causes day and night.
- Different parts of the Earth experience daylight at different times - this means that it is morning, afternoon and night in different places. This is also the reason why we have time zones.

Seasons



- It is the Earth's tilt that causes the seasons.
- The seasons are the opposite for the Northern and Southern Hemispheres.

Key Vocabulary

axis	An imaginary line through the middle of something.
galaxy	An extremely large group of stars and planets. Our galaxy is called the Milky Way.
gravity	The force which causes things to drop to the ground.
leap year	A year which has 366 days. The extra day is the 29 th February. There is a leap year every four years.
orbit	The curved path in space that is followed by an object going round and round a planet, moon, or star.
planet	A large, round object in space that moves around a star.
shadow	A dark shape on a surface that is made when something stands between a light and the surface.
Solar System	The Sun and all the planets that go round it.
spin	Turns quickly around a central point.
star	A large ball of burning gas in space.
time zone	One of the areas into which the world is divided where the time is calculated as being a particular number of hours behind or ahead of GMT (Greenwich Mean Time).
universe	The whole of space and all the stars, planets, and other forms of matter and energy in it.